

What is claimed is:

1. A method of forming an energy subtraction image,  
comprising the steps of:

i) obtaining a plurality of radiation image signals  
respectively representing a plurality of radiation images of an  
object, which radiation images have been formed with several kinds  
of radiation having different energy distributions, and

ii) forming an energy subtraction image signal from  
the plurality of the radiation image signals,

wherein the energy subtraction image signal is formed  
as an energy subtraction image signal having a pixel density lower  
than the pixel density of each of the radiation image signals.

2. A method as defined in Claim 1 wherein the pixel  
density of each of the radiation image signals is lowered, a  
plurality of low pixel density radiation image signals being  
thereby acquired, subtraction processing is performed by utilizing  
the plurality of the thus acquired low pixel density radiation  
image signals, and the energy subtraction image signal having  
the pixel density lower than the pixel density of each of the  
radiation image signals is thereby formed.

3. An apparatus for forming an energy subtraction image,  
comprising:

i) means for obtaining a plurality of radiation image  
signals respectively representing a plurality of radiation images  
of an object, which radiation images have been formed with several  
kinds of radiation having different energy distributions, and

ii) image processing means for forming an energy subtraction image signal from the plurality of the radiation image signals,

wherein the image processing means forms the energy subtraction image signal as an energy subtraction image signal having a pixel density lower than the pixel density of each of the radiation image signals.

4. An apparatus as defined in Claim 3 wherein the image processing means comprises:

a pixel density transforming section for receiving the plurality of the radiation image signals, and lowering the pixel density of each of the radiation image signals in order to form a plurality of low pixel density radiation image signals, and

an operation processing section for receiving the plurality of the low pixel density radiation image signals, which have been formed by the pixel density transforming section, and forming the energy subtraction image signal, which has the pixel density lower than the pixel density of each of the radiation image signals, from the low pixel density radiation image signals.

5. An apparatus as defined in Claim 3 or 4 wherein the apparatus further comprises means for transferring the plurality of the radiation image signals and the energy subtraction image signal toward an external device or feeding out the plurality of the radiation image signals and the energy subtraction image signal toward storage means for storing the plurality of the radiation image signals and the energy subtraction image signal.